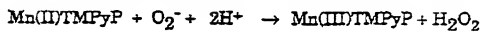
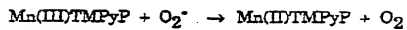


Figure 1
Mechanism



003015-061401
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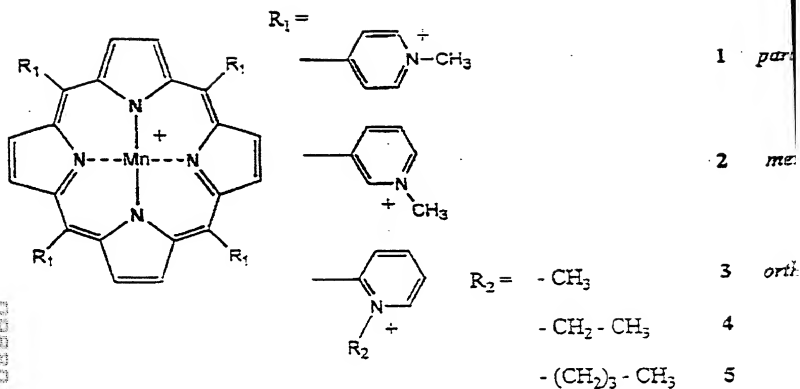


Figure 2. Manganese *meso*-tetraKis *N*-alkyl-pyridinium based porphyrin

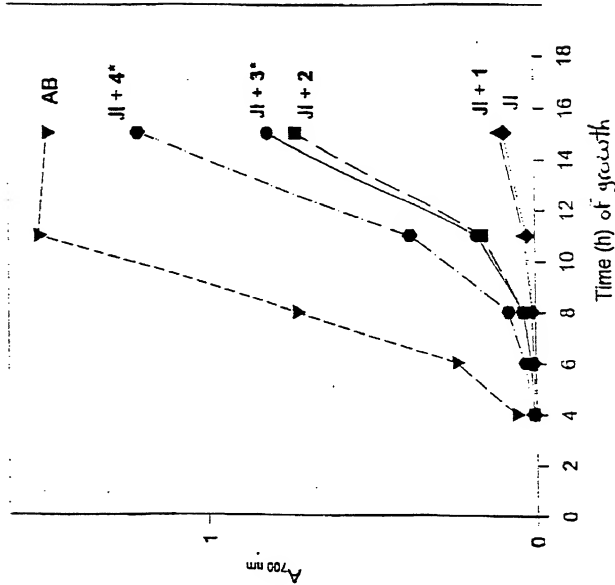
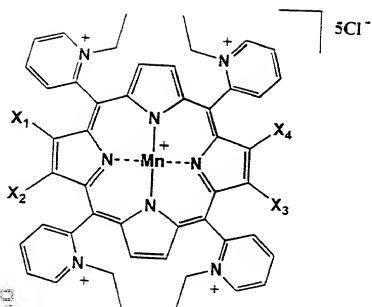


Figure 3 SOD activity in vivo (*E. coli*) of 1, 2, 3* and 4* (25 μ M) in minimal medium (*mixture of atropisomers, J1 = SODs deficient strain, AB = parental strain).



MnTE-2-PyP^{5+}

$X_1=X_2=X_3=X_4=\text{H}$

$\text{MnCl}_1\text{TE-2-PyP}^{5+}$

$X_1=\text{Cl}, X_2=X_3=X_4=\text{H}$

$\text{MnCl}_2\text{TE-2-PyP}^{5+}$

$X_1=X_2=\text{Cl}, X_3=X_4=\text{H}$

$\text{MnCl}_3\text{TE-2-PyP}^{5+}$

$X_1=X_2=X_3=\text{Cl}, X_4=\text{H}$

$\text{MnCl}_4\text{TE-2-PyP}^{5+}$

$X_1=X_2=X_3=X_4=\text{Cl}$

Figure 4

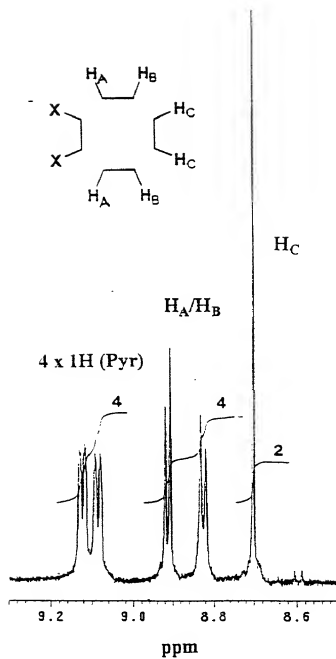


Figure 5

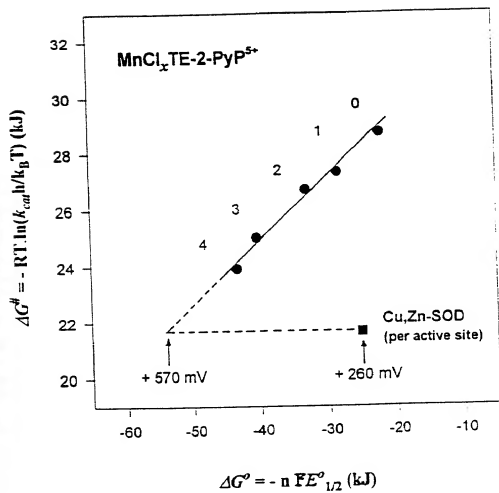
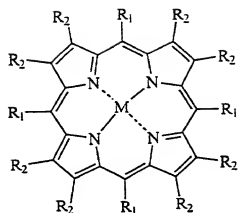


Figure 6

A

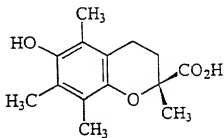


$M = Mn^{+2/+3}, Co^{+2/+3}, Fe^{+2/+3}, \text{ or } Zn^{+2}$

R_1	R_2	
	H	[TBAP]
	H	[TM-4-PyP]
	Br	[OBTM-4-PyP]
	H	[TM-2-PyP]

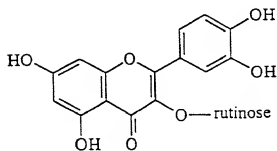
Metalloporphyrins

B



Trolox

C



(+)-Rutin

Figure 7

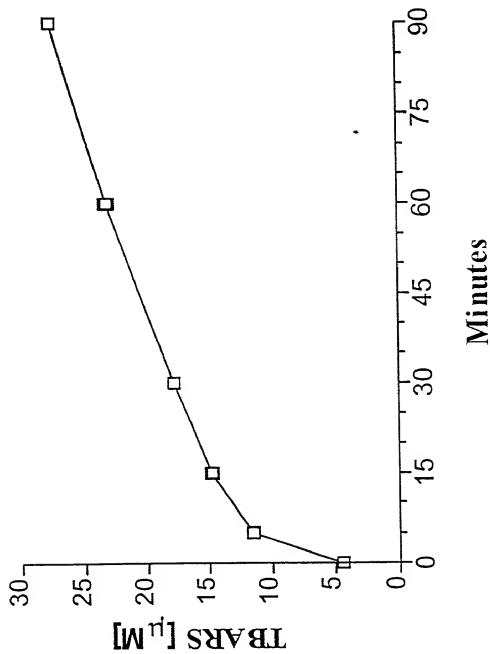


Figure 8

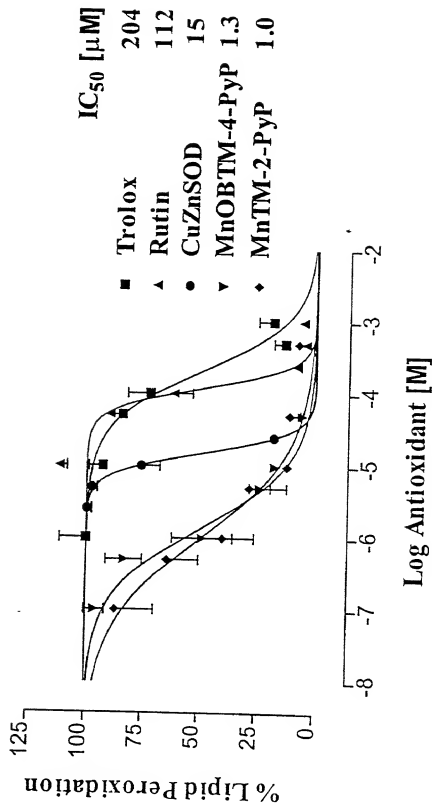


Figure 9

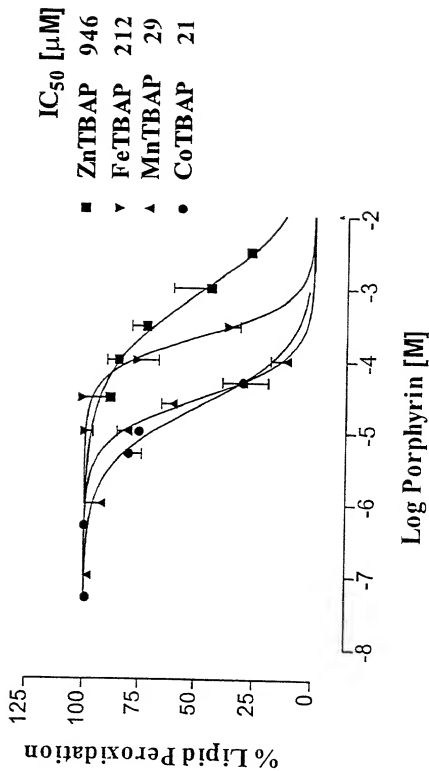


Figure 10

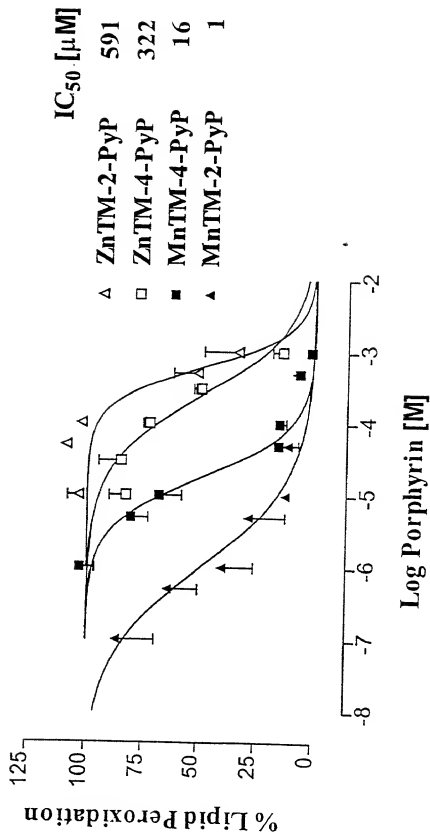


Figure 11